Volume 3, Number 2
Fall 2001

DHS+ Dimensions

A semiannual newsletter of the Demographic and Health Surveys project

Understanding how side effects of contraceptive methods play a role in discontinuation among women in the Philippines may help in the formulation of family planning policy.

MEASURE *DHS+*
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Contents

DHS Qualitative Study Examines Reasons for Contraceptive Discontinuation in Philippines

MEASURE *DHS+* recently published a report on the findings of a qualitative study of contraceptive use in Quirino Province, Philippines, that examined women's experiences with side effects of temporary contraceptive methods and related those experiences to concepts of the body and health. The study, a collaboration among the University of the Philippines Population Institute, the University of La Salette, ORC Macro, and the USAID Philippine Mission, was started in response to the high rate of contraceptive discontinuation that was found during the 1998 Philippines Demographic and Health Survey. The nationwide survey found that two out of five users of temporary contraceptive methods in the Philippines discontinued them within the first year. Next to pregnancy, the major reasons women gave for ceasing to use contraceptives were concerns about side effects and concerns about possible effects on their health.

Quirino Province was chosen as the site for the study because of two characteristics found there during the 1998 Philippines Demographic and Health Survey: 1) the highest rate of contraceptive prevalence and 2) the broadest use of methods with high discontinuation rates because of users' concerns about side effects. Four public clinics serving a mix of urban and rural populations were selected for the study. Individual interviews were conducted with 81 married women and a subsample of 24 couples who had attended the clinics at some point. Also interviewed were 20 midwives, *barangay* health workers, and *hilots* (traditional midwives) from the clinics and surrounding communities. A total of 47 interactions between clients and providers were recorded.

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In explaining their evaluation of the effectiveness of a pharmaceutical contraceptive method for them, respondents of both sexes use the term *hiyang*, a Filipino concept referring to "suitability." The physical signs most likely to result in hiyang assessment are continuation of normal menstruation, weight gain, and absence of symptoms of "high blood" such as headache, dizziness, or hotheadedness. In speculating about other side effects of contraceptive use and about possible long-term consequences, respondents focused on the menstrual changes they attributed to contraceptives.

According to Quirino women, menstruation is part of what makes and keeps women healthy. They view menstruation as important for maintaining good circulation of the blood and good balance among the bodily humors. In opposition to family planning literature, which characterizes a decrease in menstruation as an advantage of hormonal methods of contraception, the women view a slight increase as being more acceptable than a decrease. Midwives, though aware that their clients are concerned about menstrual changes, think that often it is not effective to tell them that menstrual changes resulting from contraceptive use are normal and healthy.

Menstrual changes, and the profile of side effects of hormonal contraceptive methods, lead women to speculate about possible accumulations and deficits in the body as they relate to medical complaints such as "high blood" and (to a lesser extent) "low blood" and other chronic conditions (such as tumors or cancer). In interactions at clinics, there were misunderstandings and miscommunications involving the terms "high blood" and "hypertension": high blood, a Filipino concept, was confused with hypertension, a biomedical disease. The confusion affects some women's understanding of blood pressure readings and patterns of taking contraceptive pills and iron supplements.

A significant number of women gained weight while using a hormonal method. Although most of them perceived weight gain as a benefit and indicated that they were hiyang with the method they were using, some women thought that they had gained too much weight and wanted to lose some. Women who had used Depo-Provera reported a high incidence of dryness and decreased libido that adversely affected sexual relations with their husbands. Midwives were of the opinion that sexual dysfunction and weight gain were not "real" side effects but rather "psychological" side effects experienced by women that did not constitute a good reason for switching methods.

Reported Side Effects of Temporary Contraceptive Methods

Reported side effect	Pill	DMPA*	IUD	Condoms
Weight change	10	15	3	0
Sexual changes	3	14	1	10
Menstrual changes	18	34	10	0
Amenorrhea	0	24	0	0
Headache	25	22	0	0
Dizziness	19	17	6	0
Hotheaded	16	11	0	1
Blood pressure change	8	5	0	0
Abdominal Pain/Cramps	0	0	7	1
Dry Skin	2	3	0	0
Number of women interviewed on method	56	44	28	11

*Depo-Provera

A midwife from a rural family planning clinic measures a patient's blood pressure.

A significant portion of Quirino women in the study used Depo-Provera and oral contraceptive pills according to their body's response to the method rather than as prescribed. For example, when use of Depo-Provera caused amenorrhea, women would simply stop using the method until menstruation returned and then go back to their provider for another injection. Women reported experiencing 3 months to 2 years of amenorrhea after taking Depo-Provera. After becoming amenorrheic, some women on Depo-Provera simply switched to contraceptive pills for a month to bring on menses.

Fewer women used the IUD than used hormonal methods. Women who used the IUD reported fewer side effects. Women's beliefs about the nature of the uterus, rather than about the qualities of blood, appeared to be the major reason many of them did not choose the IUD as a contraceptive method. Since Filipino women believe the uterus to be open, cold, and slippery during menstruation, they fear that using an IUD during that time would increase the exposure of the uterus to cold, increase its likelihood of falling out of the body, or both.

Recommendations made in the report address the incorporation of local knowledge into provider education and training. The report offers suggestions for modifying the mix of contraceptive methods available at government-run clinics and for providing not only culturally appropriate counseling but also strategies for maintaining clients' participation in governmental family planning programs.

Ethiopia Survey Sheds Light on Health Needs of Women and Children

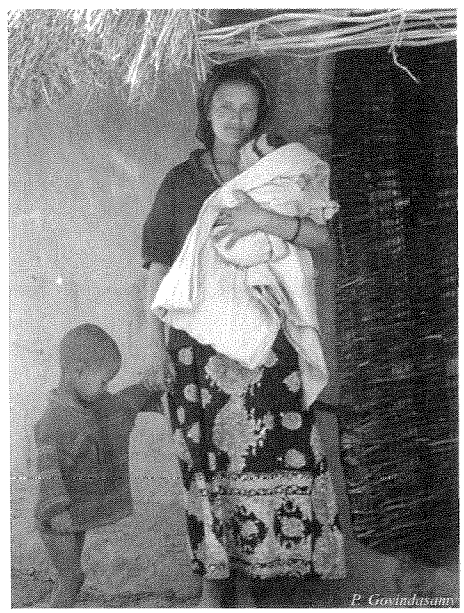
Findings from the 2000 Ethiopia Demographic and Health Survey (EDHS) were released at a national seminar held May 17, 2001, in Addis Ababa, Ethiopia. Dr. Kebede Tadesse, minister in the Prime Minister's office, opened the seminar by commending the joint effort of the Central Statistical Authority (the implementing organization), donors USAID and UNFPA, and ORC Macro (which provided technical assistance). The organizations cooperated closely with the Ministry of Health, the National Office of Population, and other Government of Ethiopia institutions throughout the planning and implementation of the survey. The EDHS collected information from a nationally representative sample of 15,367 women age 15-49 and 2,607 men age 15-59.

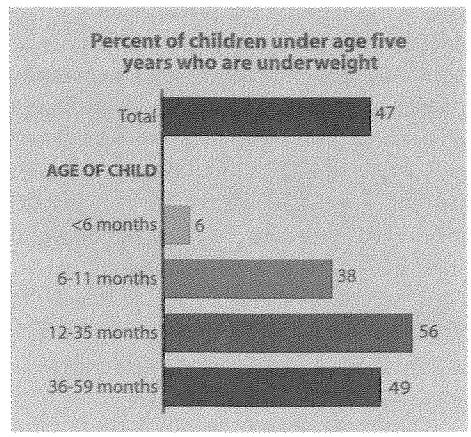
Fertility and family planning

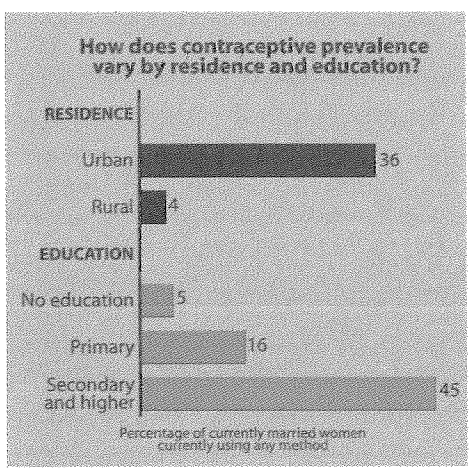
Although fertility declined during the last decade (from 6.4 children per woman in 1990 to 5.9 children per woman in 2000), it still remains high. There are wide variations by region. Fertility ranges from 1.9 children per woman in Addis Ababa to 6.4 children per woman in Oromiya.

Knowledge of contraceptive methods is widespread among women and men—86 percent of currently married women and 92 percent of currently married men are familiar with at least one method. However, there is a marked discrepancy between knowledge and use, and there is a relatively high rate of discontinuation among users. Of currently married women, 17 percent have ever used a method but only 8 percent are currently using one.

The majority of Ethiopians (68 percent) want to space or limit the number of children that they have. Women who are exposed to the risk of pregnancy and express a desire to control their fertility are considered to be in need of family planning. In Ethiopia, 36 percent of currently married women have an unmet need for family planning—22 percent for spacing and 14 percent for limiting births. If the unfulfilled demand were met, there would be a fivefold increase in the contraceptive prevalence rate (from 8 percent to 44 percent). Two out of three women gave their ideal family size as four or more children. If all unwanted births were avoided, there would be a decline in the fertility rate by one child per woman (from 5.9 births per woman to 4.9 births per woman).







Mortality

Childhood mortality in Ethiopia has declined during the last 15 years—specifically, infant mortality by 27 percent and under-5 mortality by 23 percent. Yet Ethiopia still has one of the highest rates of infant and child mortality in the world. Out of every 6 six children born in the country, one will die before the age of 5. The majority (58 percent) of deaths occur before the child's first birthday.

Maternal and child health and nutrition

Only one out of four mothers who had at least one birth during the 5 years preceding the survey received antenatal care from a health professional. As to assistance with childbirth, the overwhelming majority of births in Ethiopia (95 percent) take place at home. Just 6 percent of births were attended by a health professional. Coverage is extremely low for postnatal care as well: only 8 percent of mothers received postnatal care within the crucial first 2 days of delivery.

Only 14 percent of Ethiopian chil-

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MEASURE *DHS+* assists countries worldwide in the collection and use of data to monitor and evaluate population, health, and nutrition programs. Funded by the U.S. Agency for International Development (USAID), MEASURE *DHS+* is implemented by Macro International Inc., an Opinion Research Corporation company (ORC Macro), in Calverton, Maryland, with the Population Council and the East-West Center. *DHS+ Dimensions* is published twice a year to provide information about the program and the status of *DHS+* surveys. Send correspondence to MEASURE *DHS+*, ORC Macro, 11785 Beltsville Drive, Suite 300, Calverton, MD 20705, USA (Tel.: 301-572-0200; fax: 301-572-0999; www.measuredhs.com). Project Director: Martin Vaessen.

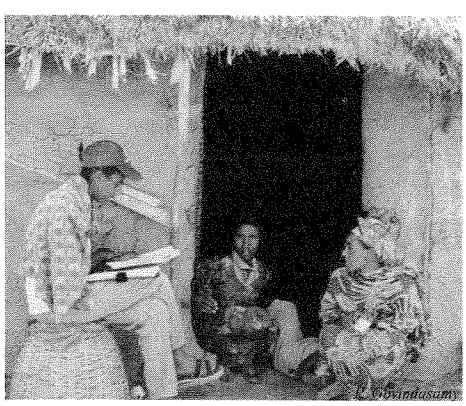
Ethiopia, *continued from page 3*

dren 12–23 months of age are fully immunized. During the 2 weeks before the survey, about one out of four children under the age of 5 had symptoms of acute respiratory infection (ARI) or diarrhea; 28 percent had a fever. Sixteen percent of children with ARI were taken to a health facility. Few children with fever—a major manifestation of malaria—were treated with antimalarial medication. Although 45 percent of the children with diarrhea were treated with some kind of oral rehydration therapy, nearly 40 percent received no treatment.

One out of two children under the age of 5 is stunted—more than one out of four is severely stunted; 11 percent are wasted—1 percent are severely wasted; 47 percent are underweight—16 percent are severely underweight. The mean height of Ethiopian women is 156 centimeters. About 4 percent are below 145 centimeters in height and considered to be at nutritional risk. Three out of 10 women fall below 18.5, the cutoff for assessing chronic energy deficiency, on the body mass index (BMI).

Knowledge about HIV/AIDS

AIDS awareness is high among both women and men in Ethiopia. Community meetings are their most important source of information on AIDS. Although most women and men know about AIDS, knowledge of prevention measures is less widespread. The survey found that 37 percent of women and 63 percent of men know of two or more programmatically important ways (abstain from sex, use condoms, limit the number of sexual partners) of avoiding HIV and AIDS. Sixty-three percent of women and 81 percent of men also have knowledge of sexually transmitted infections (STIs).



Africa Nutrition Program Advocates DHS Data

With several new publications and activities, the MEASURE *DHS+* Africa Nutrition Program makes strides in ensuring the application of DHS nutrition data for advocacy, policy and programs. The program, funded by USAID's Africa Bureau, promotes the importance of nutrition among policymakers and program planners. Recent involvement in international discourse also demonstrates that the expanded DHS survey is an important contribution to the field of international nutrition.

Earlier this year, a member of the nutrition staff visited Ghana to develop dissemination materials with the staff of the Nutrition Division of the Ministry of Health. Ms. Rosana Agble, Director of the Nutrition Division wanted to highlight Ghana's key policy concerns of micronutrient deficiency and infant feeding practices. Two wall charts and fact sheets were designed to promote the economic benefits of micronutrient deficiency prevention and gains in productivity with optimal infant feeding.

Another new dissemination product is the comparative report on micronutrients. The nutrition program has finalized the first issue of the Micronutrient Update, a biannual comparative summary of the most current country data on anemia, nightblindness, vitamin A and iron supplementation, and fortification of salt with iodine. In addition, expanded chartbooks were prepared using the recent Malawi and Tanzania DHS survey nutrition results including obesity and micronutrients. Two in-depth reports on Mozambique and Zambia will also soon be available.

Staff from the nutrition program were involved in the 17th International Congress of Nutrition meeting held in Vienna, Austria from August 27-31, 2001. MEASURE *DHS+* made a presentation on Using National Health and Nutrition Surveys for Policy, Programs and Planning: Lessons Learned from the Demographic and Health Surveys.

MEASURE *DHS+* also sponsored the symposium entitled "National and regional household nutrition and health surveys: use of information for program planning, implementation and policy formation," hosted by Irwin Shorr, Shorr Productions. The symposium explored the use of surveys historically and from an applied perspective of various levels; international, national, regional, programmatic and for evaluations. The keynote address for the session was given by Dr. Michael Latham, Professor, Division of Nutritional Sciences, Cornell University. Other presenters in the session included Dr. Michaele A. Gedeon, former Minister of Health, Haiti, Dr. Paata Imnadze, National Center for Disease Control, Republic of Georgia, Irma Silva-Barbeau, Ph.D., Silva Associates, and Dr. Malick Diara, Africare.

During the conference, the DHS nutrition program staff participated in sessions on gender and nutrition, breastfeeding, nutrition policy, nutrition and HIV/AIDS, micronutrients, WHO sessions on Growth Monitoring and infant and child feeding, UNICEF session on nutrition goals for women and children, Eurogrowth charts, and functional assessment for nutrition. They also took part in a very relevant symposium that focused on Africa from policy, programmatic and food security perspectives. Throughout the presentations, speakers from various organizations highlighted DHS data and reported using the survey results and data for analysis.

Zimbabwe Findings on Adult Mortality Trends Point to AIDS Impact

Mortality among children under age 5 also show increases during the 1990s

Findings from the 1999 Zimbabwe Demographic and Health Survey, presented in Harare in January, demonstrate the toll exacted by the AIDS epidemic during the 1990s. Although the survey showed achievements in public health (such as continued declines in fertility and increases in contraceptive prevalence), it also showed that the nation is facing rising mortality.

Rising mortality

Comparison of the 1999 data with similar data collected in the 1994 ZDHS indicate that deaths rates in the age group 15-49 have nearly tripled for both men and women since the late 1980s. The age and sex pattern of these increases strongly implicates AIDS as a contributing factor.

Rates of mortality during childhood also rose in Zimbabwe during the 1990s. The under-five mortality rate increased from 77 to 102 deaths per 1000 live births, a 32 percent jump from the early to the late 1990s. The cause or causes of this deterioration in child health need to be further explored. While childhood mortality is not as susceptible as adult mortality to the impact of the AIDS epidemic, HIV/AIDS is likely to have been both directly and indirectly responsible for at least part of the rise in child deaths. The economic deterioration that the country has experienced may also have contributed to increased childhood mortality by reducing the ability of Zimbabwean families to access effective child health services.

Knowledge about AIDS

Although knowledge of HIV and AIDS is nearly universal in Zimbabwe, the 1999 ZDHS reports that 17 percent of women and 7 percent of men were unable to cite a single means of avoiding infection. Level of education is very closely linked with the level of knowledge about preventing HIV and AIDS. Among women without formal education, 55 percent cited at least one way of avoiding HIV and AIDS, whereas among women educated beyond secondary school, more than 99 percent mentioned at least one way.

The two most widely cited means of avoiding HIV/AIDS were the use of condoms (76 percent for men, 66 percent for women) and the limitation of sexual activity to one partner (69 percent for men, 63 percent for women). Sexual abstinence was mentioned by 30 percent of men and 17 percent of women.

Sexual Behavior

Evidence indicates that the vast majority of HIV infections in Zimbabwe are contracted by means of heterosexual contact. Therefore, it is important to understand patterns of sexual behavior of men and women in order to design and monitor intervention programs to control the spread of infection. Men reported both more sexual partners and more extramarital relations than women. Whereas only 1 percent of currently married women reported having had extramarital sexual activity during the 12 months before the survey, 16 percent of married men reported having sex with women other than their spouse. In the 1999 ZDHS, 7 percent of men age 15-54 reported having "paid for sex" in the prior 12 months. Unmarried men were nearly twice as likely as married men to have paid for sex during the previous year.

Drinking alcoholic beverages is associated with higher rates of both extramarital sexual activity and multiple partnering among unmarried people. Thirty-six percent of married men and 15 percent of unmarried men reported having been drunk at least once during the prior 30 days.

Among married men who do not drink at all, 11 percent reported having had extramarital sex in the last 12 month compared with 24 percent of married men who had gotten drunk more than once in the last month. Among unmarried men who do not drink, just 5 percent reported sex with more than 1 partner in the past year compared with 33 percent of unmarried men who were drunk more than once in the last month.

Knowledge and use of condoms

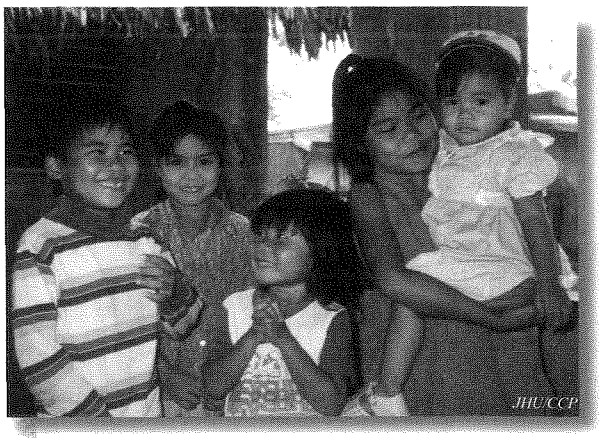
Because of the important role of the condom in combating the transmission of HIV, respondents were asked if they knew where condoms could be obtained. The findings indicate that more than a quarter of women and a sixth of men were unable to cite a place where they could obtain a condom.

Men are about three times more likely than women to have used a condom during their most recent sexual encounter. Use of a condom during the most recent sex with any partner was reported by 9 percent of women and 28 percent of men.

Both men and women used condoms far less often with cohabiting partners (mostly spouses) than with noncohabiting partners. Among men who had paid for sex in the 12 months preceding the survey, 82 percent used a condom during those encounters. Clearly both women and men understand that sex outside of stable relationships entails greater risk.

Summary of Demographic and Health Surveys

COUNTRY SURVEY	IMPLEMENTING ORGANIZATION
ASIA	
Bangladesh 2000	Mitra & Associates/NIPORT
1997	Mitra & Associates/NIPORT
1994	Mitra & Associates/NIPORT
Cambodia 2000	National Institute of Statistics/MOH
1998	SAWA Cam./Nat. Inst. of Public Health
India 1998-2000*	Various organizations
1999	International Inst. for Population Sciences
1993	International Inst. for Population Sciences
Indonesia 1997	Central Bureau of Statistics/NFPCB/MOH
1994	Central Bureau of Statistics/NFPCB/MOH
1991	Central Bureau of Statistics/NFPCB/MOH
1987	Central Bureau of Statistics/NFPCB
Kazakhstan 1999	Academy of Preventive Medicine
1995	National Institute of Nutrition
Kyrgyz Republic 1997	Inst. of Obst. & Ped., MOH
Myanmar 1996	Settlmt. and Land Rec. Dep., Min. of Agr.
Nepal 2000	New ERA
1996	Ministry of Health/New ERA
1987 (In-Depth)	New ERA
Pakistan 1991	National Institute of Population Studies
Philippines 1998	National Statistics Office/Dept. of Health
1993	National Statistics Office
Sri Lanka 1987	Dept. of Cen. & Stat., Min. of Plan Impl.
Thailand 1987	Inst. of Pop. Studies, Chulalongkorn U.
Turkmenistan 2000	MCH/MOH and MIT
Uzbekistan 1996	Inst. of Obst. & Gynec., MOH
Vietnam 1997	Nat. Comm. on Pop. and Fam. Planning
LATIN AMERICA & CARIBBEAN	
Bolivia 1998	Instituto Nacional de Estadística
1994	Instituto Nacional de Estadística
1989	Instituto Nacional de Estadística
Brazil 1996	Soc. Civil Bem-Estar Familiar no Brasil
1991(NE)	Soc. Civil Bem-Estar Familiar no Brasil
1986	Soc. Civil Bem-Estar Familiar no Brasil
Colombia 2000	PROFAMILIA
1995	PROFAMILIA
1990	PROFAMILIA
1986	Corp. Cen. Reg. de Pob./Min. de Salud
Dominican Rep. 1999	CESDEM
1996	CESDEM/PROFAMILIA
1991	PROFAMILIA
1986	Consejo Nacional de Población y Familia
1986 (Exp.)	Consejo Nacional de Población y Familia
Ecuador 1987	Cen. de Estud. de Pob. y Paternidad Responsible
El Salvador 1985	Asociación Demográfica Salvadoreña
Guatemala 1999 (Interim)	Instituto Nacional de Estadística
1997 (In-Depth 1)*	Instituto Nacional de Estadística
1997 (In-Depth 2)*	Inst. de Nutrición de Cent. y Panamá
1995	Instituto Nacional de Estadística
1987	Inst. de Nutrición de Cent. y Panamá
Haiti 2000	Institut Haïtien de l'Enfance
1994	Institut Haïtien de l'Enfance
Mexico 1987	Dir. Gen. de Plan. Fam., Sec. de Salud
Nicaragua 1997	Instituto Nacional de Estadísticas y Censos
Paraguay 1990	Centro Paraguayo de Estudios de Población
Peru 2000	Instituto Nacional de Estadística
1996	Instituto Nacional de Estadística
1992	Instituto Nacional de Estadística
1986	Instituto Nacional de Estadística
1986 (Exp.)	Instituto Nacional de Estadística
Trinidad & Tobago 1987	Family Planning Association of Trinidad/Tobago
NEAR EAST/NORTH AFRICA/EUROPE	
Armenia 2000	Nat. Stat. Service/MOH
Egypt 2000	National Population Council
1998 (Interim)	El-Zanaty & Associates
1997 (Interim)	El-Zanaty & Associates
1997 (In-depth)*	National Population Council
1995	National Population Council
1992	National Population Council
1988	National Population Council
Jordan 1997	Department of Statistics
1990	Department of Statistics
Morocco 1995 (Panel)	Ministère de la Santé Publique
1992	Ministère de la Santé Publique
1987	Ministère de la Santé Publique
Mauritania 2000	Office Nat. de la Statistique
Tunisia 1988	Office Nat. de la Fam. et de la Population
Turkey 1998	Hacettepe Inst. of Population Studies
1993	Hacettepe Inst. of Population Studies/MOH
Yemen 1997	Central Statistical Organization
1991	Central Statistical Organization

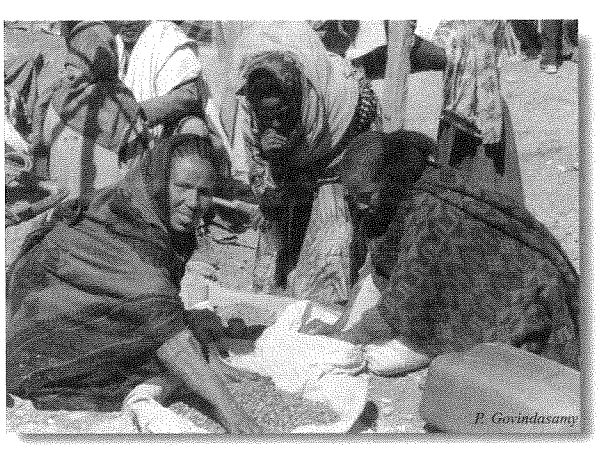


COUNTRY SURVEY	IMPLEMENTING ORGANIZATION
SUB-SAHARAN AFRICA	
Benin 2001	Institut National de la Statistique
1996	Institut National de la Statistique
Botswana 1988	Ministry of Health
Burkina Faso 1999	Inst. Nat. de la Statistique et la Démo.
1992	Inst. Nat. de la Statistique et la Démo.
Burundi 1987	Dép. de la Pop., Min. de l'Intérier
Cameroon 1998	Bur. Cen. Recensements et Études de Pop.
1991	Min. du Plan et de l'Amén. du Terr.
Central African Rep. 1994	Dir. des Stat. Dém. et Sociales
Chad 1997	Bureau Central du Recensement
Comoros 1996	Centre National de Doc. et de Rech. Sci.
Côte d'Ivoire 1998	Inst. National de la Statistique
1994	Inst. National de la Statistique
Eritrea 1995	National Statistics Office
Ethiopia 2000	Central Statistical Authority
Gabon 2000	Direction Générale de la Stat
Ghana 1998	Ghana Statistical Service
1993	Ghana Statistical Service
1988	Ghana Statistical Service
Guinea/Conakry 1999	Direction Nationale de la Statistique
Kenya 1999 (SPA)*	National Council for Population and Dev.
1998	National Council for Population and Dev.
1993	National Council for Population and Dev.
1989	National Council for Population and Dev.
Liberia 1986	Min. of Planning & Economic Affairs
Madagascar 1997	Dir. de la Dém. et des Stat. Sociales/INSTAT
1992	Centre Nat. de Recherches sur l'Env.
Malawi 2000	National Statistical Office
1996 (KAP)	National Statistical Office
1992	National Statistical Office
Mali 2000	CPS/MSSPA et DNSI
1996	CPS/MSSPA et DNSI
1987	Inst. de Sahel: USED/CERPOD
Mauritania 2000	Office Nat. de la Statistique
Mozambique 1997	Instituto Nacional de Estatística
Namibia 1992	Min. of Health and Social Services
Niger 1998	Care International
1992	Dir. de la Stat. et des Comptes Nat.
Nigeria 1999	Nat. Pop. Commission
1990	Federal Office of Statistics
Ondo State, Nigeria 1986	Ministry of Health, Ondo State
Rwanda 2000	Office National de la Population
1992	Office National de la Population
Senegal 1999	SERDHA
1997 (Interim)	Min. de l'Economie et des Finances
1993	Dir. de la Prévision et de la Stat.
1986	Min. de l'Economie et des Finances
South Africa 1998	Dept. of Health/Med. Research Council
Sudan 1990	Dept. of Stat., Min. of Fin. & Econ. Plan.
Tanzania 1999	National Bureau of Statistics
1996	Bureau of Statistics, Planning Comm.
1995 (In-Depth)*	Bureau of Statistics, Planning Comm.
1994 (KAP)	Bureau of Statistics, Planning Comm.
1992	Bureau of Statistics, Planning Comm.
Togo 1998	Direction de la Statistique
1988	Unité de Recherche Dém., U. du Benin
Uganda 2000	Uganda Bureau of Statistics
1995 (In-Depth)*	Inst. Stat. & Applied Econ., Makerere U.
1995	Dept. of Stat., Min. Fin. & Econ. Plan.
1988	Ministry of Health
Zambia 2001	Central Statistical Office
1996	Central Statistical Office
1992	University of Zambia
Zimbabwe 1999	Central Statistical Office
1994	Central Statistical Office
1988	Central Statistical Office

***India:**	12 Uttar Pradesh Benchmark Surveys
***Guatemala 1:**	Health Expenditure Survey
***Guatemala 2:**	Health Provider Survey
***Egypt:**	Reasons for Nonuse in Upper Egypt
***Kenya:**	Service Provision Assessment
***Tanzania:**	Estimation of Adult and Childhood Mortality in a High HIV/AIDS Population
***Uganda:**	Negotiating Reproductive Outcomes

Additional information on funding source, sample size, survey content, etc. can be obtained on the MEASURE *DHS+* Web site (www.measuredhs.com) under *Obtaining Data*. Customized tables using survey data are also available through the STATcompiler feature on the site.


UNICEF


P. Govindasamy

Peru Includes Measures of Domestic Violence in Fourth DHS Survey

With the publication of the survey report in May and presentation of the findings at a national seminar in June, Peru completed its fourth DHS survey. Known as ENDES 2000 and conducted by Peru's National Institute of Statistics and Informatics, it was one of the largest surveys in the DHS program. The report on the survey findings provides important information on reproductive and child health, nutritional status, mortality, women's status, and intrafamily violence.

Fertility and family planning

In the 4 years following the previous DHS survey (in 1996), fertility dropped 21 percent, a decrease that resulted in a total fertility rate of 2.9 children per woman in 2000. Despite this achievement, Peru still has large variations in fertility by type of area. Urban areas, where 64 percent of Peru's 25.7 million people live, underwent a decline from 2.8 to 2.2 children per woman. Fertility in rural areas declined from 5.6 to 4.3 children per woman. By department, Huancavelica has the highest fertility, at 6.1 children per woman; Tacna has the lowest, at 2.0 children per woman. Fertility in metropolitan Lima (the nation's capital), where 31 percent of the population (8 million people) resides, is also at 2.0 children per woman.

Two out of three married women in Peru do not want any more children. With 69 percent of reproductive-age married women using a method of contraception, national family planning prevalence is approaching that of more developed countries. Half of married women use a modern method of contraception, reflecting an increase of 9 percent since 1996. Contraceptive injection and female sterilization are the most popular modern methods, used by 21 percent and 18 percent, respectively, of users of any method.

Maternal and child health

During the 5 years preceding the ENDES 2000 survey, expectant mothers received prenatal care from a medically trained provider for the great majority of births—84 percent. That figure represents an increase of 12 percent since the 1996 survey. The percentage of births that took place in a health facility during the 5 years before the survey also increased, but not as much. The level of professional assistance at childbirth varied dramatically by type of area. In metropolitan Lima, 94 percent of births took place in a health facility. In the departments of Huancavelica and Puno, by contrast, only about 20 percent of births occurred in a health facility.

The coverage of the national immunization program is fairly high. Almost all children born 18 to 29 months before

the survey have been vaccinated with BCG and the first dose of polio and DPT vaccinations. For later doses of DPT and polio there is a drop in the vaccination rates. Only 76 percent of children have received the third dose of polio vaccine. Eighty-four percent of children have received a measles vaccination.

ARI and diarrhea continue to be major causes of childhood illness and mortality. Among children under 5 years of age, 20 percent had symptoms of ARI in the 2 weeks before the 2000 survey. Of the children who were ill with ARI, 58 percent were taken to a health provider or facility. The main reasons cited by mothers who did not take their children with ARI to get medical assistance were that they did not know what to do (29 percent) and that they were unable to pay for medical services (27 percent). In the 2 weeks before the survey, 15 percent of children under 5 experienced diarrhea. Although only 39 percent of children ill with diarrhea were taken to a health provider or facility, 68 percent received some form of oral rehydration therapy.

Mortality

The infant mortality rate in Peru for the 5-year period preceding the survey is 33 deaths per 1,000 births. The rate decreased by 37 percent from the 1990-1995 period. Under-5 mortality (which includes infant mortality) dropped from 73 deaths per 1,000 births during the 1990-1995 period to 47 deaths per 1,000 births during the 1995-2000 period, a decrease of 36 percent. Still, infant and child mortality rates are still very high in some areas. In Cuzco and Huancavelica, departments of the Sierra (mountainous) region, under-5 mortality exceeded 100 deaths per 1,000 births during the 10 years before the survey.

Maternal mortality in Peru is still very high in comparison with that of the more developed countries. With an estimated 185 maternal deaths per 100,000 births during the 7 years preceding the survey, Peru has a maternal mortality ratio about 25 times that of the United States. However, in comparison with the 1996 survey ratio of 265 maternal deaths per 100,000 births, the more recent figure does show a remarkable decrease in maternal mortality.

Nutrition

Malnutrition is still a very serious problem in Peru. Chronic malnutrition afflicts one out of four Peruvian children under 5 years of age, as evidenced by slowed growth in height as related to age. The proportion stunted (26 percent) is unchanged since 1996. Malnutrition among young children is highest in the Sierra departments of Apurimac, Cajamarca, Cusco, Huancavelica, and Huanuco.

Because of having been chronically malnourished for years, Peruvian women tend to be short. Their mean height is 1.51 meters. The 13 percent of women who are shorter than 1.45 meters have an elevated risk of complications

Continued on page 9

Peru, *continued from page 8*

in childbirth. ENDES 2000 measurements of body mass index (BMI) reveal no problem of undernutrition among women in Peru. Instead, BMI measurements show 13 percent of Peruvian women to be obese and another 34 percent to be overweight.

Anemia is an important nutritional problem for both women and young children. About one out of three women is anemic, as are half of the children under 5 years of age. Six percent of women, as well as 26 percent of children, suffer from moderate or severe anemia.

Domestic violence

More than 40 percent of ever-married women have experienced physical violence from their husbands or partners. Fifteen percent of ever-married women say that the violence occurs frequently. Women without education are more than twice as likely to experience frequent violence as women with secondary education.

Children are likely to get slaps and blows while being punished by their parents. It is reported that 41 percent of both mothers and fathers deliver blows to their children; 23 percent of mothers and 12 percent of fathers slap their children. One out of three women says that physical punishment is necessary some of the time in order to educate children.

Knowledge about HIV and AIDS

Although a large majority of women (87 percent) know of HIV and AIDS, 35 percent of rural women and 30 percent of women in the Sierra region have not heard of HIV/AIDS. Among the women who have heard of HIV and AIDS, 8 percent consider they themselves to have a moderate or high probability of contracting HIV. About 80 percent of women are aware of mother-to-child transmission of HIV.

Almost all women who know of HIV and AIDS and who have had sexual relations have heard of the condom, yet 11 percent do not know where to obtain one. A little more than half of the women say that they themselves could get a condom. However, only 8 percent of women used a condom during their last sexual encounter.

Analytical Study Compares Adolescent Reproductive Behavior in Africa

Sub-Saharan countries are characterized by some of the highest regional levels of fertility in the world—largely attributable to the early age at which men and women in the region first engage in sex, first enter into a union, and first experience birth. At the same time, there is great variation across countries in regard to age at initiation of reproductive behavior. Differences are also found across subgroups within the same country, such as variation by educational level affecting the proportion of women who had a birth before age 18. The differences and trends in age at the time of first sex, first union, and first birth among the adolescent populations in selected sub-Saharan countries were assessed in an analytical study soon to be published by MEASURE *DHS+*.

The study draws on information collected by Demographic and Health Surveys in eight countries. The countries were chosen because they had at least two surveys conducted approximately 5 years apart, each with distinct questionnaires for women and men of reproductive age regardless of marital status. Those countries are Burkina Faso, Côte d'Ivoire, Ghana, Kenya, Mali, Senegal, Tanzania, and Zimbabwe. The study looked at the probability of a young woman's giving birth, engaging in sex, entering into union before age 18 and the probability of a young man engaging in first sex or union before age 20. The main analytical tool was a multivariate logistic model with a generalized estimating equation.

The results suggest that certain sociodemographic characteristics, particularly education, have a strong influence on adolescents' reproductive outcomes. The direction of the relationship, however, is not always the same for young women as for young men. Surveys showed that in young men, more education is associated with earlier age at first sex, while for young women the opposite is true.

The two community characteristics considered in the study were the level of development in the community the adolescent resides in and the family planning environment of that community. Those characteristics were measured by means of proxy variables for the proportion of the adult community with secondary education and for the proportion that had ever used modern contraceptive methods. The findings regarding effects of community characteristics turned out to be inconclusive.

The results of the surveys in the eight countries may be useful for identifying target groups needing reproductive health services and outreach programs. The important distinctions between the reproductive health knowledge and practices of women and those of men imply that program managers and policymakers need to develop gender-specific approaches as they design youth interventions.

MEASURE *DHS+* Visitors and Events

January 2001

■ The National Dissemination Seminar for the 1999 Zimbabwe Demographic and Health Survey took place in Harare, Zimbabwe on January 23, 2001.

■ The National Dissemination Seminar for the 1999 Nigeria Demographic and Health Survey took place in Abuja, Nigeria on January 25, 2001.

R. Henry

Health providers participate in a roundtable discussion of preliminary results from the qualitative study Contraceptive Practice in Quirino Province, Philippines: Experiences of Side Effects *at the University of La Salette, Philippines.*

February 2001

■ MEASURE *DHS+* presented findings from the qualitative study *Contraceptive Practice in Quirino Province, Philippines: Experiences of Side Effects* at University of La Salette, Santiago City on February 16, 2001. It was then presented at University of Philippines Population Institute, Quezon City, on February 22, 2001.

March 2001

■ MEASURE *DHS+* participated in the annual meeting of the Population Association of America (PAA) held from March 29-31, 2001 in Washington, D.C.

May 2001

■ The National Dissemination Seminar for the 2000 Egypt Demographic and Health Survey was held on May 9, 2001 in Cairo, Egypt.

■ The National Dissemination Seminar for the 2000 Ethiopia Demographic and Health Survey was held on May 17, 2001 in Addis Ababa, Ethiopia.

■ Jameson Ndawala, Ann Phoya, and Habib Somanje visited ORC Macro in Calverton to complete the writing of the final report for the 2000 Malawi Demographic and Health Survey.

■ Chary Nazarov and Guldzeamal Akmuradova visited ORC Macro to work on the final report of the 2000 Turkmenistan Demographic and Health Survey.

■ MEASURE *DHS+* participated in the annual meeting of the Global Health Council held at the Omni Shoreham Hotel in Washington, D.C. on May 29-June 1, 2001.

June 2001

■ Noel Moussavou, Helene Bengobsame, and Jean Ndong Nkogo visited ORC Macro for the writing of the 2000 Gabon Demographic and Health Survey final report.

■ Darith Hor and Sovanratnak Sao visited ORC Macro to work on the final report of the 2000 Cambodia Demographic and Health Survey.

■ Michel Cayemitte visited ORC Macro to work on the final report of the 2000 Haiti Demographic and Health Survey.

■ The National Dissemination Seminar for the 2000 Peru Demographic and Health Survey was held on June 12, 2001 in Lima, Peru.

Participants and presenters of the 2000 Ethiopia Demographic and Health Survey National Dissemination Seminar display final reports and dissemination materials.

What's New on Our Web Site?

MEASURE *DHS*+ is committed to meeting the changing needs of its online data users. Over the past several months, *DHS*+ has been making enhancements to its Web site (www.measuredhs.com) to make accessing and using DHS data simpler and easier than ever. Here are just a few things we've been working on:

- IMPROVED PERFORMANCE/RUN-TIME: A specialized data warehousing technique was developed to significantly decrease the time it takes to generate a customized table. By switching to a filter versus a joined format, the STATcompiler is able to present results significantly faster than was previously possible, particularly with complex tabulations.

- EMAIL A FRIEND: Users can now email the URL of commonly accessed DHS web pages to a friend or colleague by clicking on the "Email this page to a friend" icon located on the navigation toolbar.

- LINKS & RESOURCES: A new Links & Resources section has recently been added to the DHS Web site. Users can now read comprehensive descriptions about or link directly to more than 100 related international and humanitarian organizations and their Web sites.

- ONLINE FEEDBACK FORM: An optional e-mail feedback mechanism has been added to tables built using the STATcompiler to allow users to contact ORC Macro directly concerning questions arising from the use of the STATcompiler or to provide feedback on the use of the STATcompiler.

- REGIONAL DATA DISPLAY: Regional data, in addition to national level data, is now available via the STATcompiler for those countries where regional data was collected.

- NEW INDICATORS: The STATcompiler will be enhanced by adding new indicators, including those based on Men's data and those based on particular modules, such as Female Genital Cutting and Maternal Mortality.

- TRANSLATION OF THE STATCOMPILER: All existing country names, chapters, table names, indicators, etc. are currently being translated into French and Spanish. This will allow international users of DHS data enhanced access to the statistics compiled via the DHS Web site.

For questions or more information on the these and other website activities, please contact:

Demographic and Health Surveys
Attn: Web Team
ORC Macro
11785 Beltsville Dr., Suite 300
Calverton, MD 20705
Email: archives@macroint.com

What's New in Print?

Country Reports

Bangladesh	1999-00 Final Report (English)
Egypt	2000 Key Findings (English)
Ethiopia	2000 Key Findings (English)
Gabon	2000 Final Report (French)
	2000 Key Findings (French)
Haiti	2000 Final Report (French)
	2000 Key Findings (French)
Malawi	2000 Final Report (English)
Peru	2000 Final Report (Spanish)

Analytical Studies

Rafalimanana, Hantamalala and Charles F. Westoff. 2001. Gap between Preferred and Actual Birth Intervals in Sub-Saharan Africa: Implications for Fertility and Child Health.

Westoff, Charles F. and Akinrinola Bankole. 2001. The Contraception-Fertility Link in Sub-Saharan Africa and in Other Developing Countries.

Yoder, P. Stanley and Mary Mahy. 2001. Female Genital Cutting in Guinea: Qualitative and Quantitative Research Strategies.

Comparative Reports

Westoff, Charles F. 2001. Unmet Need at the End of the Century.

Nutrition Publications

Malawi Nutrition Chartbook
Tanzania Nutrition Chartbook
Ethiopia Nutrition Chartbook

Other Publications

Henry, Rebecca. 2001. Contraceptive Practice in Quirino Province, Philippines: Experiences of Side Effects.

MEASURE *DHS*+ Basic Documentation

1- Model "A" Questionnaire with Commentary for High Contraceptive Prevalence Countries
2- Model "B" Questionnaire with Commentary for Low Contraceptive Prevalence Countries

Look for these 2001 survey publications coming soon!

Armenia **Nepal** **Uganda**
Mauritania **Rwanda**
Namibia **Turkmenistan**

Selected Statistics From Recent DHS Surveys

REGION/ SURVEY COUNTRY	VITAL RATES: Total Fertility Rate[a]	VITAL RATES: Total Wanted Fertility Rate[a]	VITAL RATES: IMR/ Under-5 Mortality[b]	USE OF CONTRACEPTION (Currently Married Women 15-49): % Currently Using Any Method[c]	USE OF CONTRACEPTION (Currently Married Women 15-49): % Currently Using Any Modern Method[d]	MATERNAL CARE (Births in Last 5 Yrs.): % Women Receiving Antenatal Care[e]	MATERNAL CARE (Births in Last 5 Yrs.): % Women Receiving Assistance at Delivery From Professional[e]	CHILD HEALTH INDICATORS: Median Duration (Months) of Breast-feeding[f]	CHILD HEALTH INDICATORS: % Children 0-35 Months Stunted[g]	CHILD HEALTH INDICATORS: % Children Fully Immunized[h]
ASIA										
Bangladesh 2000	3.3	2.2	80/110	54	43	33[i]	12	31	45	60
Cambodia 2000	4.0[b]	3.1	95/124	24	19	38	32	24	45	26
Indonesia 1997	2.8	2.4	46/58	57	55	82	43	24	†	55
Kazakhstan 1999	2.1	1.9	62/71	66	53	94	99	7	10[j]	81
Kyrgyz Republic 1997	3.4	3.7	61/72	60	49	97	98	17	25	82
Nepal 1996	4.6	2.9	79/118	29	26	39[k]	10[k]	31	48	43
Philippines 1998	3.7	2.7	35/48	47	28	86	56	13	†	73
Uzbekistan 1996	3.3	3.1	49/59	56	51	95[k]	98[k]	17	31	85
Vietnam 1997	2.7[b]	2.4	28/38	75	56	71	77	17	†	57
LATIN AMERICA/CARIBBEAN										
Bolivia 1998	4.2	2.5	67/92	48	25	65[k]	57[k]	18	26[l]	26
Brazil 1996	2.5	1.8	39/49	77	70	81[m]	78[m]	7	11[j]	73
Colombia 2000	2.6	1.8	21/25	77	64	91[i]	86	13	13	52[n]
Dominican Republic 1996	3.2	2.5	47/57	64	59	98	96	8	11[j]	39
Guatemala 1999	5.0	4.1	45/59	38	31	60	41	20	42	60
Haiti 2000	4.7[b]	2.7[b]	80/119	28	22	79[i]	58	19	19	34
Nicaragua 1997	3.9	2.8	40/50	60	57	82	65	12	25	73
Peru 2000	2.9	1.8	33/47	69	50	84[i]	59	22	25	66[o]
NEAR EAST/NORTH AFRICA										
Egypt 2000	3.5	2.9	55/69	56	54	53	61	18	19	92
Jordan 1997	4.4	2.9	29/32	53	38	96	97	12	8	21
Turkey 1998	2.6	1.9	43/52	64	38	68	81	†	†	46
Yemen 1997	6.5	4.5	90/121	21	10	34	22	18	52[j]	28
SUB-SAHARAN AFRICA										
Benin 1996	6.3[b]	5.0[b]	94/167	16	3	80[k]	64[k]	23	25	56
Burkina Faso 1999	6.8	6.0	105/219	12	5	61	31	27	37[j]	29
Cameroon 1998	5.2	4.6	77/151	19	7	79	58	18	29	36
Chad 1997	6.6	6.3	103/194	4	1	32	24	21	40[p]	11
Comoros 1996	5.1[b]	3.7[b]	77/104	21	11	85[k]	52[k]	20	34	55
Côte d'Ivoire 1998	5.2	4.5	112/181	15	7	84[k]	47[k]	21	22	51
Ethiopia 2000	5.9	4.9	113/189	8	6	27	6	25	52	14
Gabon 2000	4.3[b]	3.5	57/89	33	12	95	87	12	21	17
Ghana 1998	4.5[b]	4.2[b]	56/107	22	13	81	39	22	26	51
Guinea 1999	5.5	5.0	98/177	6	4	71	35	22	26[j]	32
Kenya 1998	4.7	3.5	74/112	39	31	92	44	21	33	65
Madagascar 1997	6.0	5.2	96/159	19	10	78	47	21	48	36
Malawi 2000	6.3	5.2	104/189	31	26	91	56	24	49	70
Mali 1996	6.7	6.0	123/238	7	5	47[k]	40[k]	22	30	32
Mozambique 1997	5.6	5.9	135/201	6	5	71	44	22	36	47
Niger 1998	7.5	7.2	123/274	8	5	40	44	21	41	18
Senegal 1997	5.7	4.6	68/139	13	8	82	47	21	†	†
South Africa 1998	2.9	††	45/59	62	61	94	84	††	††	63
Tanzania 1999	5.6	4.8	99/147	25	17	49[i]	36	21	44	68
Togo 1998	5.4	4.2	80/146	24	7	82	59	24	22[j]	31
Zambia 1996	6.1	5.3	109/197	26	14	96	47	20	42[j]	67
Zimbabwe 1999	4.0	3.4	65/102	54	50	93[i]	83	19	27	75

† = Not available from survey data.
†† = Not available until publication of final report.
a Based on 3 years preceding survey (women 15-49).
b Based on 5 years preceding survey.
c Excludes prolonged abstinence.
d Excludes periodic/prolonged abstinence, withdrawal, "other."
e Care provided by medically trained personnel.
f Children <3 years old (any breastfeeding).
g Height-for-age z-score is below –2 SD based on the NCHS/CDC/WHO reference population.
h Children 12-23 months (BCG, measles, 3 doses each DPT/polio) vaccinated at any time before survey.
i Based on last birth.
j Children 0-59 months old.
k Based on births in the preceding 3 years.
l Children 3-35 months old.
m Care provided by doctor.
n Excludes measles.
o Children 18-29 months old.
p From 1992 ENPS-II.
q Based on births during the preceding 4 years.

For more indicators, and to build custom tables with DHS data, visit the STATcompiler at www.measuredhs.com